

Title: Appendix E Quality Management Plan for Programs and Project Management
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**Appendix E**

**Quality Management Plan**

**for**

**Programs and Project Management**

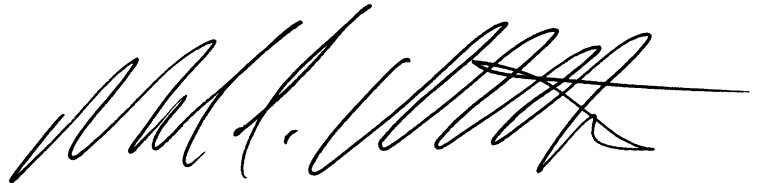
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Changes to this document require the concurrence of the District Staff Chiefs and approval by the DD PMPD, and shall only be made following the procedures described herein.

## **CONTENTS**

### **1.0 PURPOSE**

### **2.0 SCOPE**

### **3.0 REFERENCES**

### **4.0 DEFINITIONS**

### **5.0 POLICY**

### **6.0 QUALITY MANAGEMENT**

**6.1 Project Initiation, Coordination and Team Development.**

**6.2 Project Quality Control.**

**6.3 Program/Project Management Prepared Documents.**

### **7.0 CORRECTIVE AND PREVENTIVE ACTIONS**

**7.1 Lessons Learned Program.**

**7.2 A-E Performance Evaluations.**

### **8.0 QUALITY TOOLS**

**8.1 PMBP User Manual.**

**8.2 Checklists.**

**8.3 Training.**

**8.4 PM Site Visits.**

### **9.0 QMP PREPARATION, REVISION and ADMINISTRATION**

### **10.0 RECORDS**

## 1.0 PURPOSE

The purpose of this Quality Management Plan is to establish the foundation of general policies and principles to be followed by Programs and Project Management Division to continuously improve the level of quality delivered to our customers, both internal and external.

## 2.0 SCOPE

This Quality Management Plan (QMP) applies to all Programs and Project Management Quality Control activities and shall be followed by all members of the PM organization.

## 3.0 REFERENCES

- a. [AR 25-400-2, The Modern Army Record Keeping System \(MARKS\)](#)
- b. [AR 5-1, Army Management Philosophy](#)
- c. [ER 5-1-11, Program and Project Management](#)
- d. [ER 415-1-11, Biddability, Constructibility, Operability](#)
- e. [ER 415-345-38, Transfer and Warranties](#)
- f. [EP 715-1-7, Architect-Engineer Contracting \[SPF1\]\[SPF2\]](#)
- g. [ER 1110-1-12, Quality Management](#)
- h. [ER 1110-2-1150, Engineering and Design for Civil Works Projects](#)
- i. Leadership for Total Army Quality, Concept Plan Feb. 1993
- j. A-E Guide, Volume 1, Design Guidance
- k. A-E Guide, Volume 2, MCACES Guidance
- l. A-E Guide, Volume 3, Specification Guidance
- m. CECW-AG Memorandum, Model Agreement for Preconstruction Engineering and Design (PED), 3 Dec 1996
- n. CECW-B/CECW-A Memorandum, Agreements for Specifically Authorized Civil Works Projects and Separable Elements Involving Non-Federal Construction Work, Advances of Non-Federal Funds, or Contributions of Non-federal funds for Construction in the Absence of Federal Appropriations-Guidance Memorandum.[SPF3]
- o. [ER 1165-2-124, Construction of Harbor and Inland Harbor Projects by Non-Federal Interest](#)
- p. CECW-L/CECW-P Memorandum, Integration of Project Cooperation Agreements (PCA's) and Supporting Project Documents, 17 March 1994.
- q. CESPCK Project Management Business Process User Manual, May 1999

#### **4.0 DEFINITIONS**

Customer - The owner, local sponsor, client, user or beneficiary, internal or external, of a Sacramento District service or product.

Project Manager (PM) - The PM is the leader of the project delivery team and is responsible for managing the overall project scope, cost and schedule.

Project Delivery Team (PDT) - The PDT is comprised of the Project Manager, all technical support team members, including outside agency personnel, and the customer. The PDT is responsible, as a team, for the development and delivery of required products and services.

Project Management Plan (PMP)- The PMP is the detailed, specific plan used to manage and control the delivery of a specific project from its inception to completion. It is comprised, at a minimum, of the project scope, PROMIS resource plans, PROMIS schedule, Organizational Scopes (Scopes of Service), or A-E Scope of Work and the Quality Control Plan.

Project Management Business Process (PMBP) - All products and services provided by the District will be accomplished in accordance with this process as defined by the PMBP Standard Operating Procedures utilizing the District's Automation Information Systems; PROMIS, MS Project, CEFMS and the Local Database.

Quality - Quality shall be a primary concern in the development and delivery of Products and Services. All products and services shall meet or exceed our customers stated and implied expectations. To achieve quality, we strive to put the right people with the right skills and tools on the right job; hold each person responsible for the quality of his or her own work; and insure that all projects conform to applicable legal, environmental and life safety requirements.

#### **5.0 POLICY**

The policy of the Sacramento District Programs and Project Management Division is to consistently provide high quality project management services and products developed through appropriate Project Delivery Teams that meet our customer's expectations for quality, scope, schedule and budget. The Project Manager has the overall responsibility to insure that adequate schedule time and funds are provided for all quality-related activities, including preparation of quality control plans and all review activities.

#### **6.0 QUALITY MANAGEMENT**

Customer Centered Leadership - Every action that is undertaken within Programs and Project Management Division shall be questioned as to how it directly or indirectly affects the customer. The Project Manager, in conjunction with the Project Delivery Team shall insure that they capture and document all customer functional and technical requirements and commitments in the final Project Management Plan.

Continuous Improvement - Individuals within Programs and Project Management Division shall challenge the status quo and be ever vigilant for opportunities to improve existing processes and products. Ideas for process/product improvements can be put forth through supervisory channels or directly through the District's suggestion program in the Resource Management Office.

Empowerment - The Project Manager is the District Engineer's direct representative for the projects he/she is assigned and is accountable as such for the overall management and leadership of those projects and PDT's.

## **6.1 Project Initiation, Coordination and Team Development.**

A Project Manager is assigned to every project to serve as the project team leader and to provide overall management, leadership and accountability for the project. The Project Manager shall follow PMBP Implementation Memorandum #3 for assembling the project team. It is through this process that appropriate data will be reviewed to determine whether or not in house technical resources are available, and if not, whether, and to what extent, other Corps or Architect-Engineer (A-E) resources will be pursued to accomplish the work. Additional direction on use of in-house personnel vs. other sources is contained in Corporate Board Memorandum #99-04. If the decision is made to use an A-E, appropriate technical resources will be made available to the PM to assist in development of the Scope of Work, providing technical guidance to the A-E and for technical review of the A-E products.

### **6.1.1 Project Management Plan.**

All projects shall be executed in accordance with a PMP developed by the project team members, including the customer. The PMP shall be developed and maintained at a level of detail commensurate with the size and complexity of the project. The PMP shall be prepared/updated in accordance with PMBP Implementation Memorandum #14 and include as a minimum the overall project scope, the PROMIS resource plans, the PROMIS schedule (MS Project), all necessary internal Scopes of Service or A-E Scope of Work and the Quality Control Plan.

#### **6.1.1.1 Project Scope.**

This shall include the project description, initial project parameters, key products to be developed, tasks to be accomplished, listing of applicable design criteria, key milestones, commitments to the customer/sponsor, list of team members and the team communication strategy.

#### **6.1.1.2 PROMIS Resource Plans.**

The resource plans are comprised of the work breakdown structure, developed from the minimum WBS's contained in PMBP Implementation Memorandum #4, the required resource assignments and associated costs.

#### **6.1.1.3 PROMIS Schedule.**

This is developed from the final work breakdown schedule for those tasks identified in PROMIS as network analysis system (NAS) activities. The NAS utilized by this District is Microsoft Project. The PM works with the team members to identify tasks to be accomplished task duration and task relationships, both parent/child and task dependencies to construct the total project schedule.

#### **6.1.1.4 Scopes of Service (SOS)/Scope of Work (SOW).**

The SOS's serve as a contract between the PM and the individual technical/functional organizations. The Project Manager shall prepare each SOS in accordance with PMBP Implementation Memorandum #8. The Scope of Work for an A-E Contract would essentially be a compendium of Scopes of Service as would have been developed for in house services, without the cost information which is developed as a separate Government Estimate for the purposes

of negotiating with the A-E firm.

#### 6.1.1.5 Quality Control Plan (QCP).

A QCP is required for every product or service provided by the Corps, whether produced using in-house or A-E personnel. The purpose of the QCP is to lay out a specific plan to insure development of a quality product or service from inception through completion of the Quality Control Certification. The content of the QCP is dependent on the complexity of the product or service being provided and can range from a generic QCP to a Project/Product/Service Specific QCP. An outline of a standard QCP is contained in the Engineering Division Appendix A of this District QMP. The QCP is a living document and becomes part of the PMP.

### 6.2 Project Quality Control.

The Project Manager plays a key role in ensuring development/delivery of quality products and services. The PM must work with all team members in development of project QCP's. The functional chiefs are responsible for the quality of the products they deliver as part of the project. It is the PM's responsibility to insure that each project has a QCP commensurate with the complexity of the specific project. The PM must provide adequate funding and schedule time for the development of the project QCP and for all quality-related reviews required during the course of project development. The PM may delegate responsibility for development of project QCP's to the appropriate team members; however, the PM is ultimately responsible for the development and implementation of the required quality control activities.

### 6.3 Program/Project Management Prepared Documents.

During the course of project development, some documents are prepared in the PM organization. They include:

- a. Project Study Plan and Project Management Plan (PSP/PMP)
- b. Pre-Construction, Engineering and Design (PED) Agreement (Civil Works only)
- c. Project Cooperation Agreement (PCA) (Civil Works only)
- d. Memorandum of Agreement (MOA)
- e. Memorandum of Understanding (MOU)

These documents are considered PM products and are subject to Quality Control activities like all other products. A generic Quality Control Plan shall be developed to cover the PM products listed above. Specific Quality Control Plans can be developed for those PM products listed above that involve unique issues. PM's shall follow all existing guidance regarding development of the above products, specifically in regards to content, timing of completion of these documents and Corps approval/signature processes.

## 7.0 CORRECTIVE AND PREVENTIVE ACTIONS

### 7.1 Lessons Learned Program.

A formalized Lessons Learned System for Military/Civil and HTRW projects is in place and managed by the Criteria Management Unit in Engineering Division. PM's shall access the system when developing project Scopes

of Service/Scopes of Work for like projects to avoid repetitive deficiencies. A PMBP Lessons Learned Program has been put in place in IMO on the Intranet to capture tips regarding use of the chosen AIS tools, PROMIS/MS Project/CEFMS/Local Database (MS Access). PM's shall make note of new tips as they are made aware by IMO.

## **7.2 A-E Performance Evaluations.**

For those A-E products managed by PM's, A-E performance evaluations shall be prepared in accordance with HQUSACE guidance, including interim evaluations, if necessary, and final evaluations. Evaluations shall be provided to Engineering Division who will enter them into the A-E Contract Administration Support System (ACASS).

## **8.0 QUALITY TOOLS**

### **8.1 PMBP User Manual.**

All PPMD personnel shall familiarize themselves with and follow the PMBP Standard Operating Procedures, Corporate Board Memos and User Guides for every project to provide consistency in management processes and development of project data. All of these documents are available via the Sacramento District Home Page.

### **8.2 Checklists.**

PM's shall utilize the HQUSACE checklists for development of Project Cooperation Agreement (PCA) and Preconstruction Engineering and Design (PED) Agreement packages.

### **8.3 Training.**

Management will ensure that all PPMD personnel are properly trained to perform their assigned duties through use of appropriate PROSPECT, other Government and Non-Government training.

### **8.4 PM Site Visits.**

PM's will visit study/project sites prior to development of the Scope of Services/Scope of Work to fully understand customer concerns and requirements. PM's are encouraged to visit project construction sites to interact with construction personnel and gain insight into design/construction issues for use in developing future study/design Scopes of Service/Scopes of Work.

## **9.0 QMP PREPARATION, REVISION and ADMINISTRATION**

This QMP shall be revised and administered in accordance with the procedures outlined in ISO 9001 [Engineering Quality Procedure \(EQP\) 05-01, "Procedure for the Preparation and Administration of Procedures"](#) for consistency purposes. The Deputy District Engineer for Programs and Project Management, or his designee, will ensure that this QMP is reviewed and updated annually, at a minimum. A copy of the approved QMP and any revisions shall be distributed to each Branch of PPMD. The QMP shall be posted on the Internet and linked to the Sacramento District

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Home Page by Engineering Division Engineering Technology and Specifications (ET&S) Section.

## **10.0 RECORDS**

Engineering Division has established and maintains electronic files for each QMP in accordance with ISO 9001 EQP 16-04. Programs and Project Management Division has established and maintains the original hard copy of this QMP and all revisions. All revisions are provided to Engineering Division for updating of the electronic file.